



Animal and Plant
Health Inspection
Service

Veterinary Services

Center for Veterinary
Biologics

1920 Dayton Avenue
PO Box 844
Ames, IA 50010

(515) 337-6100

Escherichia coli Anti-F41 Pilus Polyclonal Antibody (F41 PAb) - Lot ID IRP F41 PAb, NVSL Lot 1

Document Number: CVB-DAT-0068

Revision: 02

Previous Number: BB DAT0087.04

Vault: CVB-Released

Section/Area: CVB-DAT

Effective Date: 24 May 2021

Notes: *Strain or Source: N/A, Fill date: April 30, 1993*

United States Department of Agriculture
Animal and Plant Health Inspection Service
Center for Veterinary Biologics
P. O. Box 844
Ames, IA 50010

1. **Reagent Name:** *Escherichia coli* Anti-F41 Pilus Polyclonal Antibody (F41 PAb).
2. **Strain or Source:** Not applicable
3. **Lot Number:** IRP F41 PAb, NVSL Lot 1
4. **Fill Date:** April 30, 1993
5. **Expiration Date:** April 30, 2022

Precautions: There are no known hazards associated with the use of this reagent.

6. **Intended Use:** For use in potency testing of *E. coli* biologicals containing the F41 pilus antigen, according to **Supplemental Assay Method (SAM) 623**.
7. **Instructions for Use:** Dilute the F41 PAb 1:1,000 in cold carbonate-bicarbonate coating buffer (0.05M, pH 9.6) and use immediately, according to **SAM 623**.
8. **Test of Reagent:** The F41 PAb was evaluated using agglutination assays and enzyme-linked immunosorbent assay. The F41 PAb was shown to be specific for F41 pilus antigen, with negligible reactivity against other pilus types and non-piliated mutants of *E. coli*. It exhibits minimal nonspecific binding (background) in assays performed according to **SAM 623**. The optimal use dilution was determined by titration, using the assay described in **SAM 623**.
9. **Container Size, Type, Weight, or Volume:** 250-μL aliquots in microfuge vials (Lot size: 279 mL)
10. **Storage Conditions:** -20° to -80°C for long term storage. Vial may be held at 2°- 7°C for several weeks.
11. **CVB Technical Contact:** Bacteriology Section, Center for Veterinary Biologics, (515) 337-7020 or FAX (515) 337-7673.
12. **Origin and Passage History:** NVSL Lot 1
13. **Method of Preparation:** F41 PAb was produced in New Zealand White rabbits. Each rabbit received 5 intravenous doses of NADC *E. coli* strain 1839 (F41) given at 7-day intervals. The first 3 doses contained formalin-killed *E. coli*, and the final 2 doses contained live *E. coli*.

Serum was harvested, pooled, and adsorbed 6 times with non-piliated bacteria (NADC, *E. coli* strain 1839) to remove antibodies not directed against F41 pili. The F41 PAb was filter-sterilized and frozen at -70°C or lower.

14. Other:

Restrictions: For use only in potency tests conducted according to **SAM 623**.

Reagent orders and feedback should be sent *including phone number* to the following email address: VS.DB.CVB.Reagent.Requests@usda.gov

Reagent orders forms (APHIS Form 2018) can be found on the CVB website.